

FIG.1

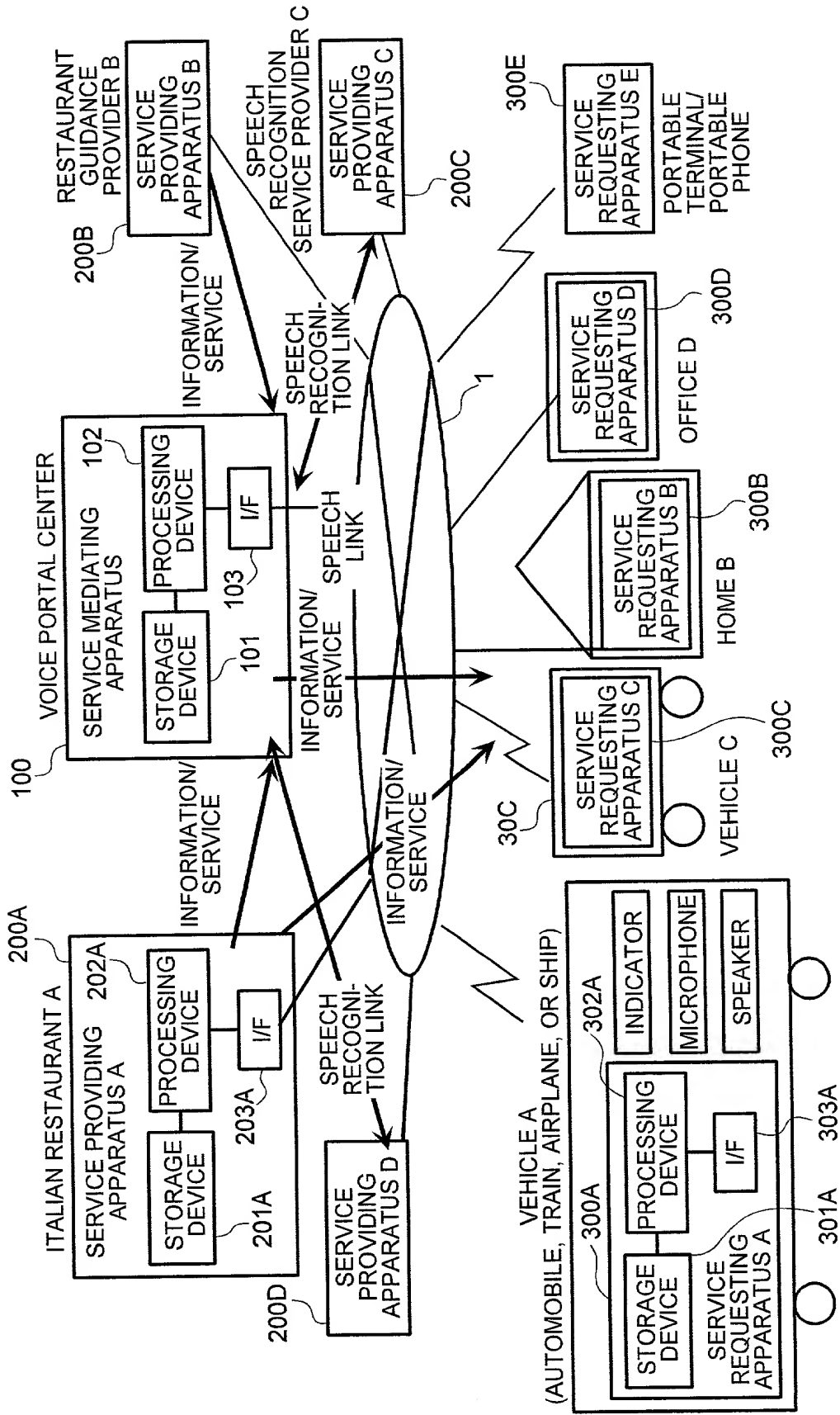


FIG.2

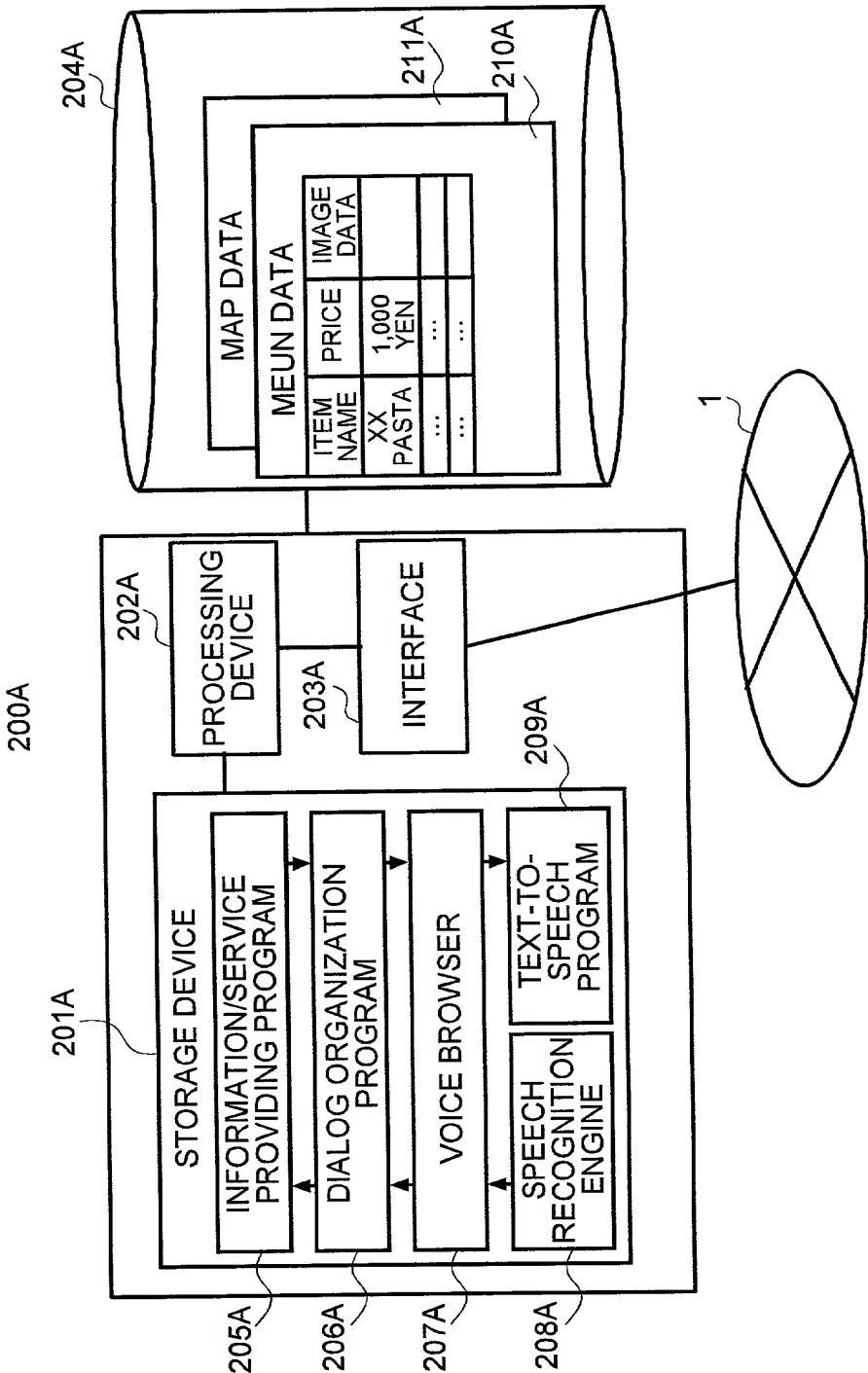


FIG. 3

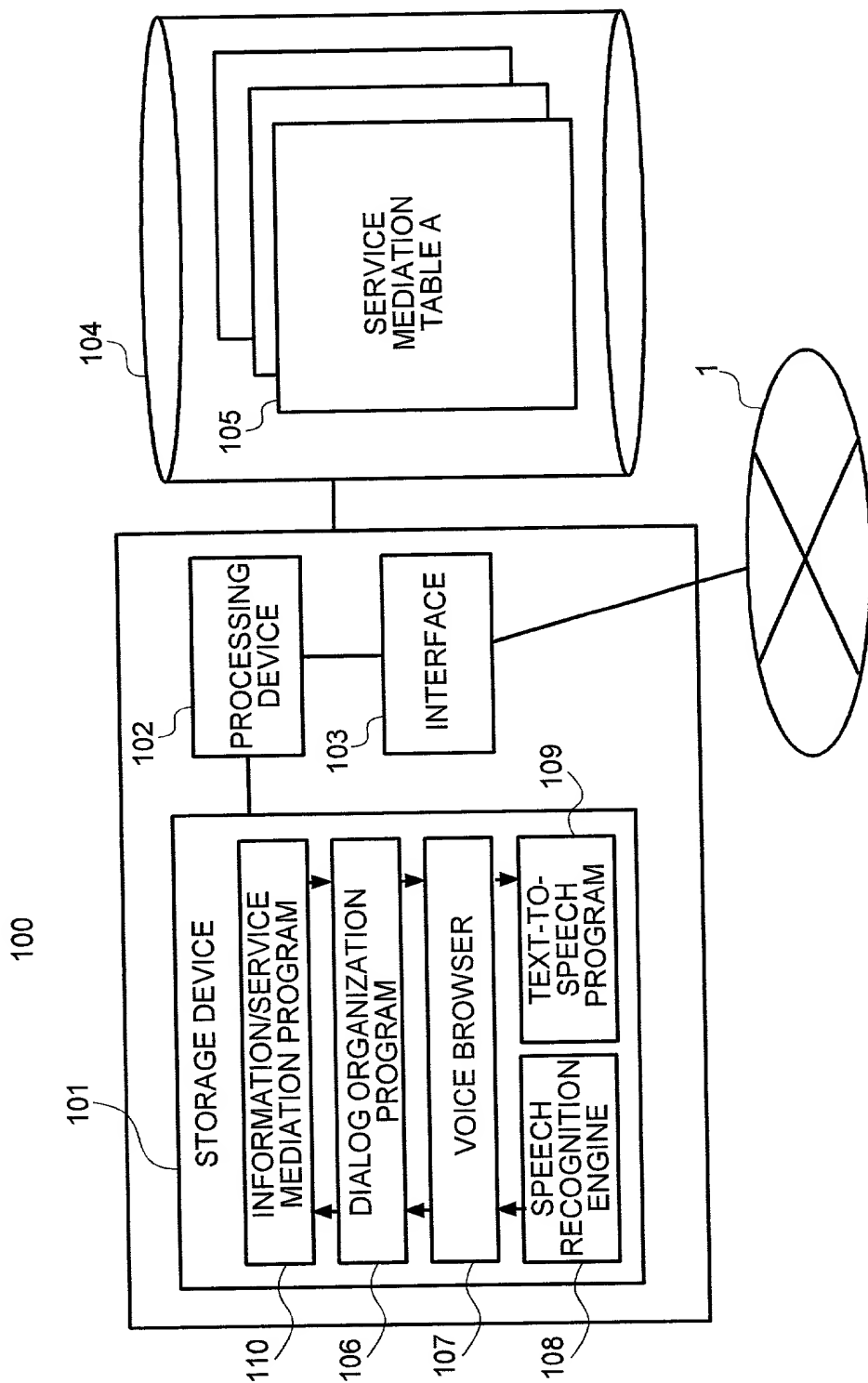
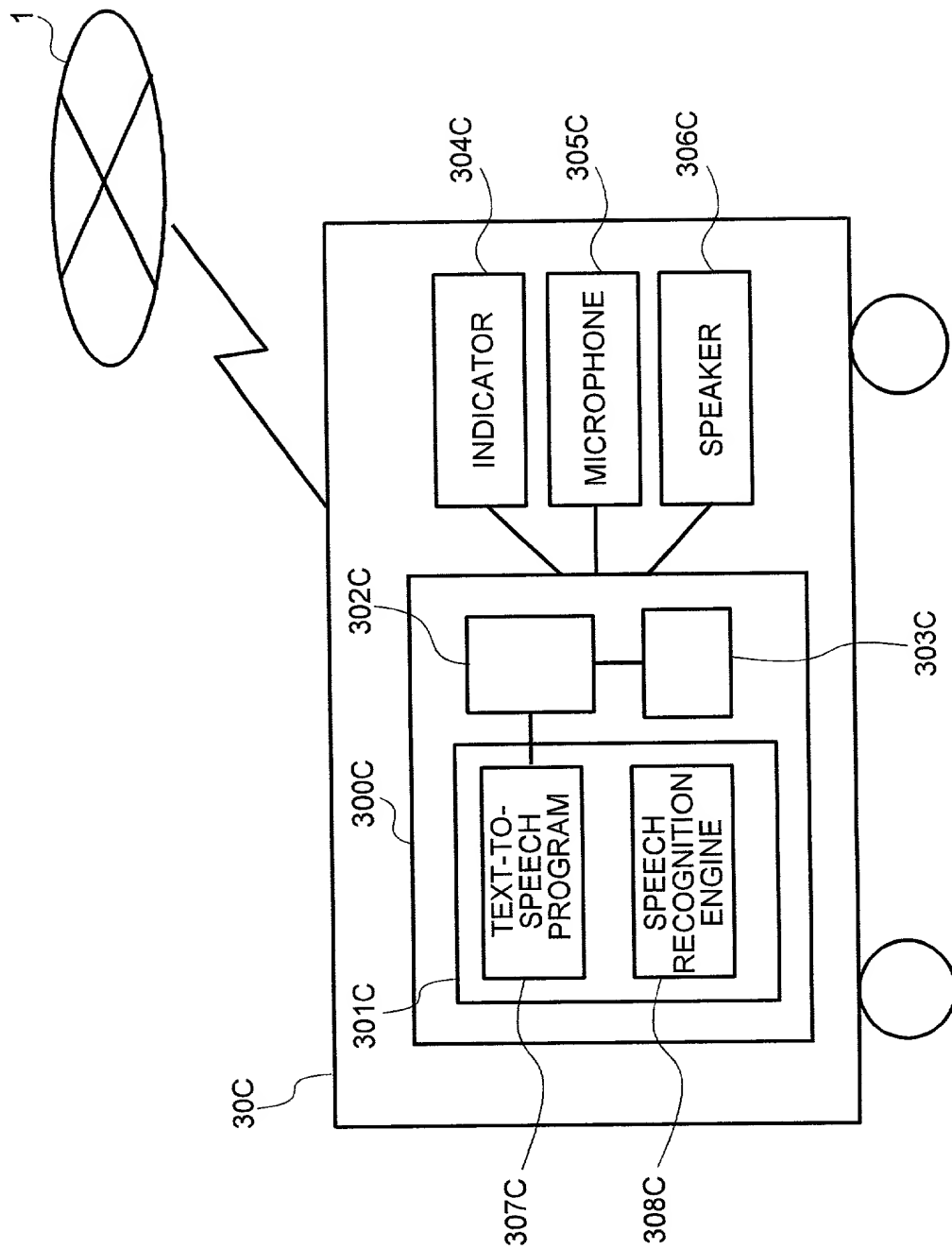
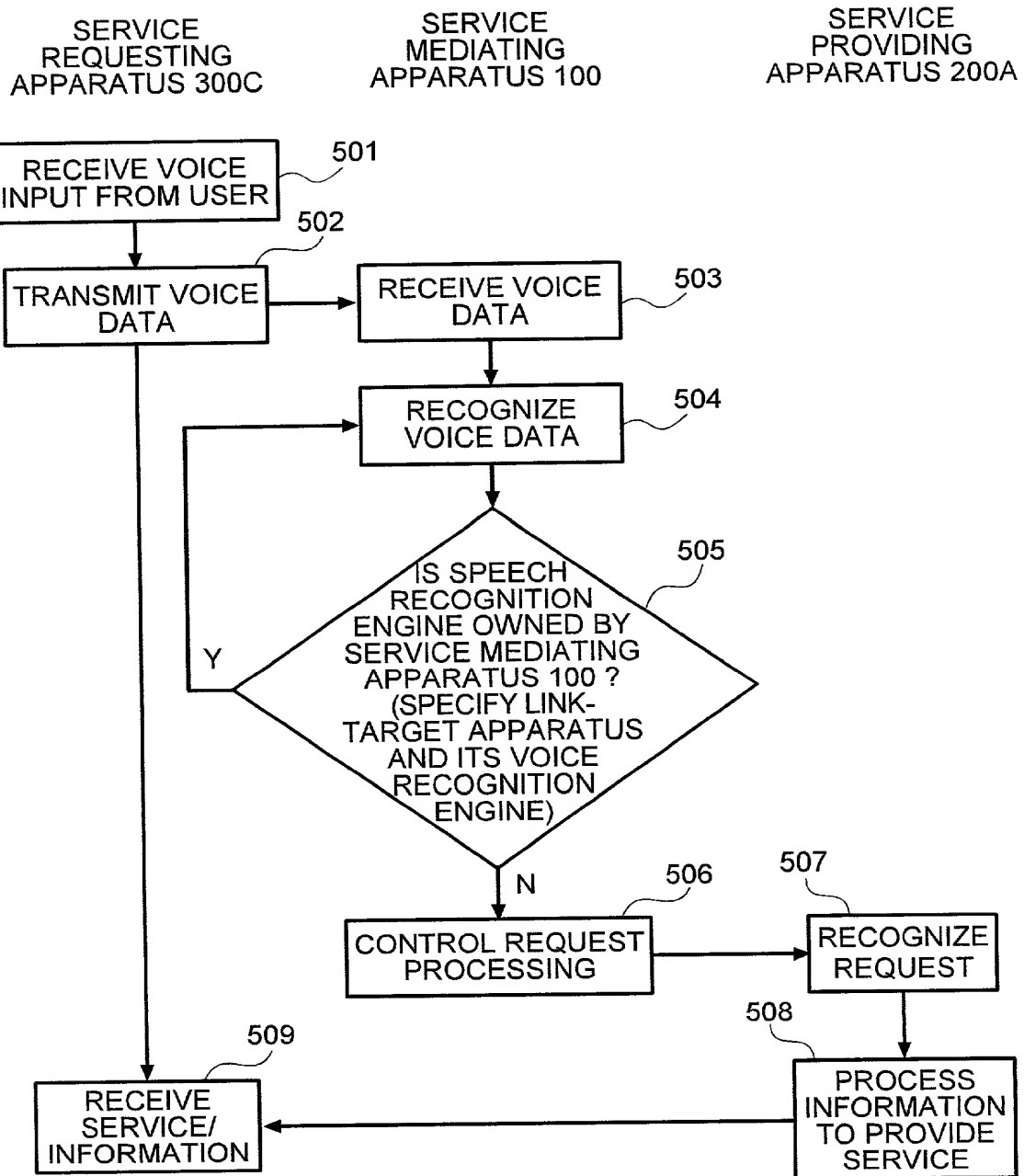


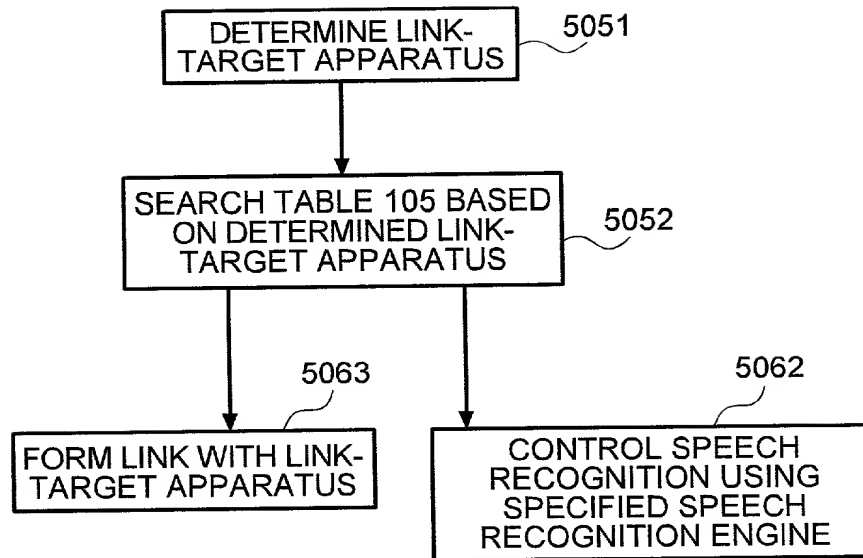
FIG. 4



# FIG.5



**FIG.6**



**FIG.7**

```
<menu>
  <prompt>SELECT A SHOP</prompt>
  A<link="jump SERVICE PROVIDING APPARATUS 200A"
    "engine SERVICE PROVIDING APPARATUS 200A"
    :
  :
</menu>
```

TABLE 1 COMMUNICATION DATA FORMATS AND COMMUNICATION PROTOCOLS EMPLOYED BETWEEN  
TERMINALS OF SERVICE REQUESTING APPARATUSES AND SERVICE MEDIATING APPARATUS

FIG.8

TABLE 1 COMMUNICATION DATA FORMATS AND COMMUNICATION PROTOCOLS EMPLOYED BETWEEN  
TERMINALS OF SERVICE REQUESTING APPARATUSES AND SERVICE MEDIATING APPARATUS

SERVICE REQUESTING APPARATUS	SERVICE MEDIATING APPARATUS	DATA FORMAT	COMMUNICATION PROTOCOL	DESCRIPTION
VOICE BROWSER	DIALOG CONTROL	· VXML DATA	· HTTP	
DIALOG RECOGNITION	DIALOG CONTROL	· SEMANTIC DATA	· TCP	VOICE DIALOG LINK
SPEECH RECOGNITION	VOICE BROWSER	· SPEECH · RECOGNITION DATA	· TCP	
SPEECH RECOGNITION	SPEECH RECOGNITION	· SPEECH · RECOGNITION DATA · CODED VOICE · DATA FOR VOICE · RECOGNITION	· TCP · TCP/UDP	SPEECH RECOGNITION LINK
VOICE ANALYSIS	SPEECH RECOGNITION	· CODED VOICE · DATA FOR VOICE · RECOGNITION	· TCP/UDP	
VOICE INPUT	SPEECH RECOGNITION	· VOICE	· VOICE CALL	CT(Computer Telephony)

TABLE 2 COMMUNICATION DATA FORMATS AND COMMUNICATION PROTOCOLS EMPLOYED  
BETWEEN SERVICE MEDIATING APPARATUS AND SERVICE PROVIDING APPARATUSES

SERVICE MEDIATING APPARATUS OR SERVICE PROVIDING APPARATUS (LOCAL)	SERVICE MEDIATING APPARATUS OR SERVICE PROVIDING APPARATUS (DESTINATION)	DATA FORMAT	COMMUNICATION PROTOCOL	DESCRIPTION
DIALOG RECOGNITION	DIALOG RECOGNITION	· DIALOG DATA · SPEECH · RECOGNITION DATA · CODED VOICE · DATA FOR VOICE · RECOGNITION	· IIOP(CORBA) · IIOP(CORBA) · TCP/UDP	SPEECH RECOGNITION LINK
SPEECH RECOGNITION	SPEECH RECOGNITION	· SPEECH · RECOGNITION DATA · CODED VOICE · DATA FOR SPEECH · RECOGNITION	· IIOP(CORBA) · TCP/UDP	SPEECH RECOGNITION LINK

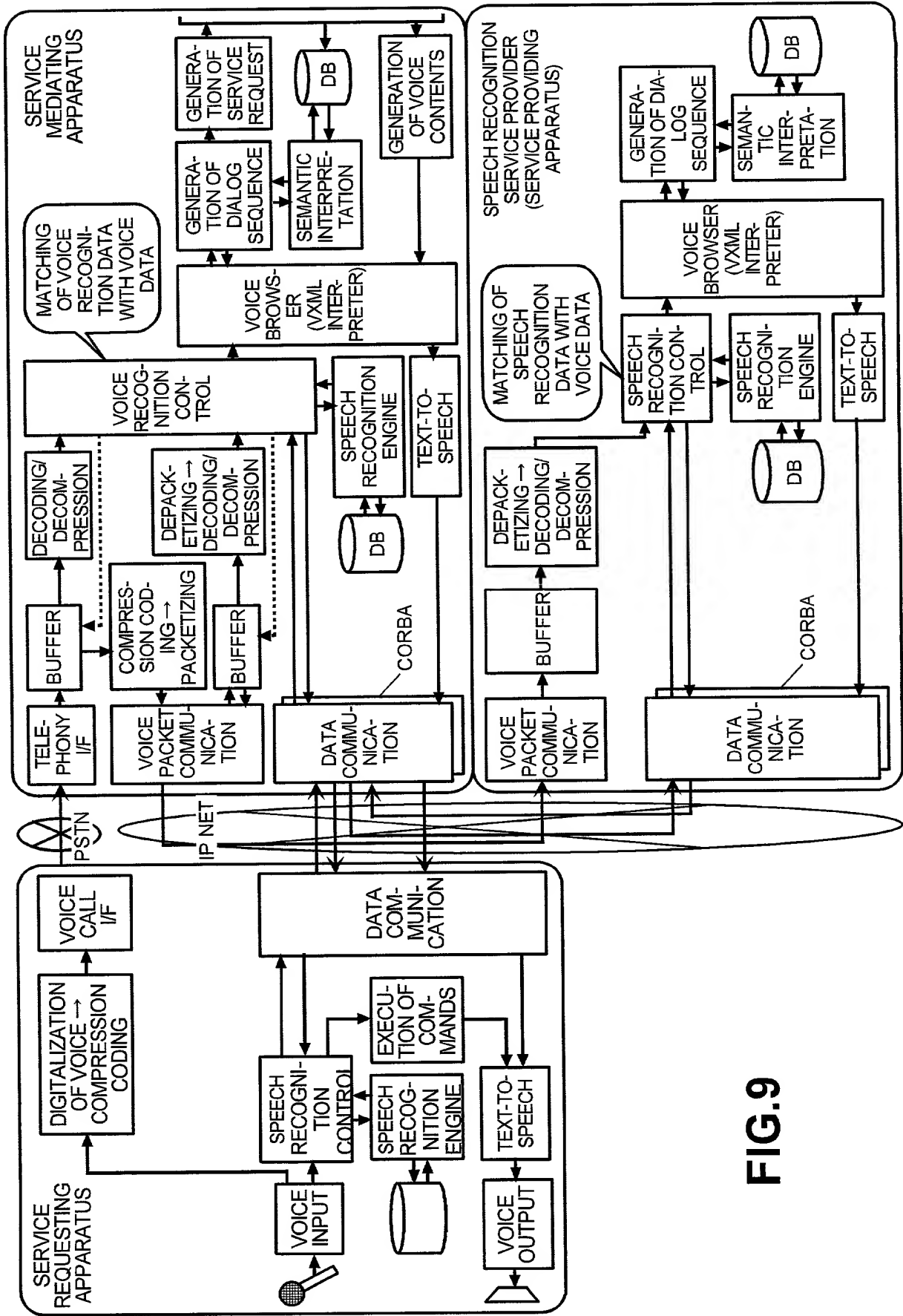


FIG.9



FIG.10

105

105-1

105-2

SELECTIONS				SEARCH FOR SPEECH RECOGNITION ENGINE	
CATEGORY	SUBCATEGORY	NAME OF ESTABLISHMENT	EVALUATION	LINK-TARGET APPARATUS	SPEECH RECOGNITION ENGINE
RESTAURANT	ITALIAN	A	TASTE :GOOD, PRICE :HIGH, PARKING CAPACITY :10 CARS, SERVICE HOURS :10:00-22:00	SERVICE PROVIDING APPARATUS 200-A	SERVICE PROVIDING APPARATUS 200-A
		B	...	SERVICE PROVIDING APPARATUS 200-B	SERVICE PROVIDING APPARATUS 200-C
	JAPANESE	C	...	SERVICE PROVIDING APPARATUS 200-B	SERVICE PROVIDING APPARATUS 300
THEME PARK	AMUSEMENT PARK	...	...	...	...
	...	...	...	...	...

# FIG.11

<menu>

<prompt>SELECT A SHOP</prompt>

<link jump="SERVICE PROVIDING APPARATUS 200A"  
engine=" ngram bergein nbest confidence"

⋮

</menu>

1100 1101 1102 1103 1104 1105 1106 1107 1108 1109 1110 1111 1112 1113 1114 1115 1116 1117 1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1129 1130 1131 1132 1133 1134 1135 1136 1137 1138 1139 1140 1141 1142 1143 1144 1145 1146 1147 1148 1149 1150 1151 1152 1153 1154 1155 1156 1157 1158 1159 1160 1161 1162 1163 1164 1165 1166 1167 1168 1169 1170 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199

# FIG.12

SERVICE REQUESTING  
APPARATUS 300C

SERVICE MEDIATING  
APPARATUS 100

SERVICE PROVIDING  
APPARATUS 200A

